

<p>2001-367172/38 NIPPON NSC LTD 1999.09.22 1999-268508(+1999JP-267043) (2001.03.29) C04B 24/26 Cement dispersant obtained by polymerizing polyalkylene oxide monoallyl ether, polyalkylene oxide (meth)acrylate, and maleic acid and/or maleic acid anhydride and acrylic acid, methacrylic acid and/or itaconic acid (Jpn) C2001-112514 N(AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW) R(AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW) Addnl. Data: TSUZUKI T, MIYATA A 2000.09.19 2000WO-JP06370, 1999.09.22 1999JP-268508</p>	<p>A93 L02 (A14 A25) NINS- 1999.09.21 *WO 200121542-A1</p>	<p>A(4-F4, 4-F5, 10-E7B, 10-E8C, 12-R1A) L(2-C8)</p> <p>(meth)acrylate, a monomer (C) of at least one of a maleic acid and maleic acid anhydride and a monomer (D) of at least one of acrylic acid, methacrylic acid and itaconic acid.</p> <p><u>DETAILED DESCRIPTION</u> (A) is of formula <math>\text{CH}_2=\text{CR}^1\text{CH}_2\text{O}(\text{R}^2\text{O})_m\text{R}^3</math> R<sup>1</sup> = H or methyl group; R<sup>2</sup> = 2-3C alkylene group; R<sup>3</sup> = H or methyl group; m = an integer 1-300. (B) is of formula <math>\text{CH}_2=\text{CR}^1\text{COO}(\text{R}^2\text{O})_n\text{R}^3</math>.</p> <p><u>USE</u> The cement dispersant is suitable for high strength concretes.</p> <p><u>ADVANTAGE</u> The agent reduces retardation of cement hardening and has improved dispersion properties.</p>	<p>WO 200121542-A+</p>
<p><u>NOVELTY</u> Cement dispersant contains a copolymer obtained by polymerizing a monomer (A) of at least one polyalkylene oxide monoallyl ether, a monomer (B) of at least one polyalkylene oxide</p>			

#### EXAMPLE

To a 1 litre flask, 375g octaethylene oxide monoallyl ether (A1) and 100g distilled water are introduced and heated while stirring. The mixture is maintained at 95°C. Next, 25g methoxy triacontaethylene oxide monomethacrylate (B2), 75g maleic acid (C2) and 25g acrylic acid (D1) are dissolved in water to form an aqueous solution, and 15g Na persulphate is dissolved in 100g distilled water to prepare another solution. These solutions are stirred to the previous mixture, and the mixture is polymerized to form the cement dispersant.

#### TECHNOLOGY FOCUS

Organic Chemistry - Preferred Agent: The copolymer is neutralised with an alkali. The agent contains 50-95 weight parts (A), 3-40 weight parts (B), 1-20 weight parts (C) and 1-20 weight parts (D), or 3-40 weight parts (A), 50-95 weight parts (B), 1-20 weight parts (C) and 1-20 weight parts (D). The weight average molecular weight of the neutral copolymer is 5000-200000.  
(33pp0982DwgNo.0/0)